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TITLE : INK JET PRINTING LIQUID

ABSTRACT : PROBLEM TO BE SOLVED: To obtain a water-based ink jet printing liquid capable of giving highly water-resistant printed matter for any image-receiving material by adding a pigment to an ethylenically unsaturated monomer followed by emulsion polymerization in the presence of a surfactant, etc.

SOLUTION: This printing liquid is obtained by incorporating (A) 100 pts.wt. of a radical-polymerizable ethylenically unsaturated monomer such as methyl methacrylate, ethyl acrylate or α -methylstyrene with (B) 1-15 pts.wt. of a pigment such as Monoazo Yellow followed by emulsion polymerization in the presence of (C) 0.1-10 pts.wt. of a surfactant such as an alkylphenol ether-based reactive surfactant, (D) 0.1-5 pts.wt. of a polymerization initiator such as t-butyl hydroperoxide and (E) water as the essential component in such a condition as to be $\leq 0.5 \mu\text{m}$ in monomer droplet size. In this case, it is preferable that, in addition to the component A, 0.1-10 pts.wt., based on the total monomer, of a carboxyl-bearing monomer such as acrylic acid is used for the purpose of improving the preservability of this printing liquid.

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